

**Erosion Prevention and Sediment Control (EPSC)  
Phase 1**

**For**

**State of Vermont Agency of Transportation (VTrans)  
Rochester BRF 0162 (17) - Bridge 16  
Rochester, Vermont**

**Contractor and EPSC Contact:**

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**EPSC Plan Preparation Date:**

June 4, 2014

Estimated Project Dates:

**Project Start Date: June 9, 2014  
Project Completion Date: October 31, 2014**

**DRAFT**

Project No. 12455

Prepared By:



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## **1.0 EROSION PREVENTION AND SEDIMENT CONTROL NARRATIVE**

### **1.1 Project Description**

The intent of this Phase 1 EPSC Plan is to address the initial scope of site work for the project site that will include mobilization to the site, preparation of on-site and off-site access and staging areas, installation of perimeter sediment and erosion controls, and installation of crane pads, and removal of the existing bridge wingwalls, guardrails, and other incidental work. A subsequent EPSC Plan will be provided to address the remaining work phases (bridge removal and replacement), stream diversion and dewatering, site restoration, and final stabilization.

See Sheet 166 of the Contract Plans for information related to the project description prepared for the Vermont Agency of Transportation (VTrans) for this project.

### **1.2 Site Inventory**

See Sheet 166 of the Contract Plans for information related to the site inventory, such as drainage characteristics, vegetation, soils, and sensitive areas, prepared for VTrans for this project.

### **1.3 Risk Evaluation**

See Sheet 166 of the Contract Plans for information related to the risk evaluation prepared by the VTrans for this project. The project is not expected to disturb one or more acres of area and does not require coverage under Vermont Agency of Natural Resources (VANR) Construction General Permit No. 3-9020; therefore, a Risk Evaluation is not required. In the event that changes are made prior to or during construction that result in the disturbance of one or more acres, the contractor shall be responsible for additional permitting with the VANR.

Please see the updated EPSC Plans in Appendix B that depict the previously approved and additional impact areas for this Phase 1 work scope. The previously approved impacts include approximately 19,353 square feet (SF) of area, and the additional impacts beyond the permitted limits are approximately 20,443 SF, for a total impact area of approximately 39,796 SF. Since the total impact area is less than one acre, the project is not expected to require coverage under the VANR Construction General Permit.

### **1.4 Erosion Prevention and Sediment Control**

See Sheets 166 to 171 of the Contract Plans for information related to general erosion prevention and sediment controls and typical details prepared for VTrans for this project. Please also refer to the VANR "Low Risk Site Handbook for Erosion Prevention and Sediment Control," dated August 2006, which is considered part of this EPSC Plan.

Section 1.5 provides a detailed construction sequence that identifies the type of work activity to be performed, the specific earth disturbances to be addressed, and specific erosion control measures (relating to the typical measures discussed on Sheets 166 to 171 of the Contract Plans) that will be implemented during Phase 1 of the work to prevent erosion, control sediment transport, and achieve timely stabilization of disturbed areas.

See also Appendix B for updated EPSC Plans (Phase 1) that include detailed site-specific information provided by the Contractor to supplement the general EPSC Plan information provided in the Contract Plans, and document and address construction activities and related erosion and sediment controls to be implemented during Phase 1 of construction.

The proposed staging areas, access, and other information for Phase 1 was provided by the Contractor. The EPSC plans should be updated in the event that any changes are made to this approach. Information on the subsequent work phases will be provided under a separate EPSC Plan submission at a later date.

## **1.5 Sequence and Staging**

**General Construction Sequence:** The overall work related to this project involves the removal and replacement of bridge #16 on Vermont (VT) Route 73 over the Corporation Brook in Rochester, VT, as depicted on the Site Location Map provided in Appendix A. The project includes complete removal and replacement of the existing concrete bridge superstructure and substructure, stream channel and bank stabilization, and approximately 300 feet of the roadway work on VT Route 73. The existing 28-foot span by 23.5-foot wide bridge will be replaced along the same alignment with a new 62-foot single-span by 31-foot wide concrete bridge. The project also includes a new pile foundation, abutments, approach slabs, roadway rehabilitation, associated traffic controls, temporary access and staging for the bridge work, guardrails, stone fill along the stream channel banks, earthwork, stream diversion measures, erosion and sediment controls, and site restoration. Phase 1 includes only the preliminary work necessary for site setup, establishing access and staging areas, removal of the existing bridge wingwalls, guardrail removal and initial erosion and sediment controls related to this limited work scope.

The following is a general summary of the overall project phases anticipated for completion of this project:

- Phase 1 - During this phase, traffic will continue over the existing bridge and on VT Route 73 during the initial site setup. Limited single-lane closures will be utilized on each side of the road to accommodate the necessary work.
- Phase 2 - This phase will involve complete removal and replacement of the existing bridge superstructure and substructure, stream channel work and associated stream diversion measures, and roadway and approach work. Limited duration road closures will be implemented to accommodate the necessary work.

- Phase 3 - This phase will involve completion of any remaining roadway and approach work, final pavement, guardrail and shoulder treatments, embankment restoration, and final site restoration. At the completion of Phase 2, the new bridge will be fully operational, allowing traffic to resume over the new bridge. During this phase, limited single-lane closures will be utilized on each side of the road to accommodate the necessary work.

**Traffic Sequencing:** Since a road closure is not allowed for the initial Phase 1 of this project, temporary single-lane closures will be implemented according to the approved traffic control plan to facilitate the preliminary work phase. While limited road closures will be necessary for subsequent work phases that include removal and replacement of the existing bridge, this will be addressed in subsequent phases of the EPSC Plan for this project.

**Stream Diversion Sequencing:** Although some limited stream diversion and dewatering measures may be necessary for Phase 2 and 3, Phase 1 does not involve any substantial work below the top of the stream banks along Corporation Brook. In fact, most work will take place outside of the brook, except where minor impacts are necessary during bridge wingwall removal and installation of staging, access and crane pads for future work. During Phase 1, geotextile filter curtains (a.k.a. turbidity barrier) will be installed along the stream banks on each side of the Corporation Brook to fully enclose and control sediment from any disturbed work areas during this phase.

Additional temporary perimeter erosion controls and stabilization (i.e., stone check dams, silt fence, etc.) will be installed in conjunction with impacts along the brook, as detailed in the EPSC Plans. Once Phase 1 has been completed, all disturbed areas will be temporarily stabilized in anticipation of the subsequent project phases.

**Overall Project Phasing:** The overall project phasing will be as follows:

1. Mobilization to the site, setup field office, and other facilities.
2. Establish construction limits.
3. Setup traffic controls on VT Route 73.
4. Establish perimeter erosion controls.
5. Tree clearing, as needed.
6. Setup Phase 1 staging and access areas, including any related traffic controls.
7. Establish temporary access and staging for bridge wingwall removal.
8. Remove existing bridge wingwalls, guardrail, and any other structures that are part of this project phase.
9. Install temporary stabilization for all areas disturbed during this phase.

Within each work phase, it is important to limit the area of disturbance to locations where construction activities are underway and stabilize them as quickly as possible. The construction activities will be sequenced according to the construction sequencing provided below to minimize the duration and area of exposed soils within the limits of disturbance and to allow for efficient

completion of work. Some variation in the sequence of construction activities and erosion control measures may eventually be necessary at each work area, depending on the specific site conditions and progress of work. In this case, the EPSC Plans and narrative will be updated by the Contractor as necessary to document these changes for the project site and specific activities.

The intended construction sequence is as follows:

1. **Pre-Construction Meeting:** Conduct a pre-construction meeting, which should include the Contractor, the VTrans Resident Engineer, the construction environmental engineer, and any other parties deemed necessary.
2. **Clearing Limits:** Flag all clearing limits with survey tape where tree or vegetation removal will be necessary.
3. **Wetland Limits:** Flag all wetland areas, including top of stream bank, with survey tape within project limits.
4. **Limits of Construction:** Install project demarcation fencing to delineate the limits of construction, which the Contractor will access with vehicles or equipment, or disturb during completion of all required work. This task shall include clearly delineating jurisdictional wetland areas that are permitted for disturbance or to remain undisturbed. Project demarcation fencing will generally be installed along the top of slopes above areas of excavation or to cordon off areas and to prevent access during unsafe working conditions.
5. **Traffic Controls:** Install all necessary traffic controls along VT Route 73 per the Contract Plans and the VTrans requirements. Temporary traffic controls are anticipated to include separate temporary traffic barricades, jersey barriers, markings, and signage for short-term lane closures as necessary during Phase 1 activities such as mobilization, installation of temporary facilities, stabilized construction entrances, material deliveries, structure removal or movement of equipment and vehicles. This access may vary during the progress of work depending on the side of the road that will be closed off, and the requirement to maintain thru-lanes for one-way or two-way traffic.
6. **Perimeter Controls:** Install silt fence perimeter controls at the limit of disturbance. This task will include, at a minimum, a line of silt fence down-gradient of all temporary or permanent disturbances within the project limits, as shown on the EPSC Plans for each project phase. Additional silt fence will also be installed along the top of the river banks, at the top of slopes above areas of excavation, at the toe of graded slopes, limits of work, or other areas as necessary to control erosion and prevent sediment from impacting adjacent undisturbed areas and surface waters. Silt fence may also be needed down-gradient of temporary travelways and access roads, since significant grading and surface disturbances are possible during access road and staging area setup and usage. Silt fence

will be installed parallel with the existing contours and where appropriate to protect downstream undisturbed areas.

7. **Tree Clearing:** Clear all trees and significant vegetation, in accordance with the project clearing limits or as directed by the Resident Engineer, within previously flagged or fenced construction limits, and simultaneously install temporary stabilization measures, including temporary seed and mulch, wood chips, and/or crushed stone on disturbed areas. All disturbed slopes steeper than 3:1 will be protected with temporary erosion matting, where necessary.
  
8. **Stabilized Construction Entrances:** Grade and install stabilized construction entrances where needed within the work area, as shown on EPSC Plans. Since VT Route 73 is a paved roadway, stabilized construction entrances may only be required where the existing pavement and subbase materials have been removed, or during initial work to install access and staging areas. Stabilized construction entrances may only require short tracking pads where temporary access roads meet existing pavement as necessary to control tracking of sediment beyond the work areas, and to assist with dust control on each end of the work area. Full-length stabilized construction entrances may not be needed in most cases, and will be determined in the field. Some form of stabilized construction entrance or tracking pad is anticipated for temporary access and staging on the southeast and southwest sides of the work area during the initial project phase, and these may be left in place during subsequent project phases. Adequate traffic controls shall be in place along VT Route 73 in the vicinity prior to installing and using the stabilized construction entrances.
  
9. **Temporary Construction Access and Staging Areas (Phase 1):** Temporary construction access roads and staging areas are anticipated during Phase 1 for accessing the existing bridge wingwalls, and establishing crane pads, as shown on the EPSC Plans. All necessary temporary stabilization, erosion controls, and surface runoff measures shall be installed simultaneously with grading activities to prevent erosion on disturbed areas, contain sediment, and convey stormwater through the disturbed areas, especially in any areas of concentrated drainage. This process may include, in addition to perimeter controls already installed, diversion and stone-lined swales, stone check dams, temporary erosion matting on slopes, water bars, and temporary mulch. Where difficult or unsuitable soil conditions (wet, soft, etc.) are encountered within access roads or staging areas, temporary surface stabilization may require an application of crushed stone placed on geotextile fabric, as directed by the Resident Engineer. Stone fill or existing stone materials from areas to be excavated may be utilized for creating level staging pads adjacent to the work areas, if approved by the Resident Engineer.

**Temporary Access Roads:** Where temporary access roads have to be benched into the existing slopes, stormwater runoff from up-gradient areas may concentrate along the perimeter silt fence at the toe of slope, and a

temporary diversion ditch may be necessary along this silt fence to convey drainage to a discharge point into the existing stream channel. Stone check dams and/or stone lining shall be installed along the silt fence as necessary to control flow velocity, contain sediment, and limit turbidity at the discharge point. Temporary erosion matting shall be installed on all cut and fill slopes steeper than 3:1 within 48 hours of slope grading and prior to any rain events. Water bars may be installed along the surface of the access road at 50-foot intervals as necessary to control runoff. All related erosion controls shall be in place prior to utilizing access roads. Any portion of the access roads that are installed below the ordinary high water level of the White River shall consist of clean stone fill with minimal fine materials. Geotextile filter fabric is also recommended below any stone fill that is placed in the river to minimize impacts to existing vegetation and river bed materials.

**Staging and Stockpiling:** Where additional staging areas are located outside immediate work areas, such as on level terrain within the right-of-way (ROW), within lane closures, or on off-site areas, additional surface water, or erosion controls are required as the specific field conditions dictate. Earth stockpiles shall be temporarily stabilized with seed and mulch if the duration of exposure is expected to be greater than 14 days. Silt fence shall be placed on the down-gradient side only if necessary to contain stockpiled materials and prevent sediment from being washed into the existing ditches, stream, or onto undisturbed areas. The Contractor may utilize temporary lane closures along roads adjacent to the work areas for equipment or material delivery, such as concrete trucks, if approved by the Resident Engineer.

**Off-Site Staging and Disposal Area:** Activities that will take place at approved off-site areas shall adhere to all applicable erosion and sediment control requirements contained in this EPSC Plan, property owner requirements, and other applicable requirements contained in the VTrans approval of this area. This may include installation of stabilized construction entrances, site perimeter controls, perimeter controls around stockpile areas, and stabilization measures, where necessary, at the off-site locations, as determined in the field. The off-site areas shall also be monitored in conjunction with on-site areas for the entire duration of usage and until all disturbed areas have been fully stabilized.

10. **Stream Diversion Measures:** Setup stream diversion measures for Phase 1 prior to any disturbances to the streambed or banks in accordance with the approved EPSC Plan. This task is anticipated to include turbidity barriers, as detailed on the EPSC Plans.

**Turbidity Barriers:** Turbidity barriers and/or sand bag cofferdams shall be in place around all active work areas that will involve disturbances on the bed and/or banks of the Corporation Brook. These measures shall be installed prior to any upgradient disturbances, and shall be maintained until all disturbed areas are fully stabilized. The turbidity barriers shall be adequately secured in a fixed position within the river with anchors and

lines as necessary to prevent excessive movement during varying flow levels and velocities. The turbidity barriers shall be long enough to extend from the water surface to the river bed during normal high water conditions. It is critical that the Contractor maintains the turbidity barriers to ensure that they are functioning as intended, are maintained in a relatively fixed position, do not collect excessive debris, and are repaired in the event of damage from debris or other causes.

11. **Stream Channel and Bank Disturbances:** No significant channel or bank impacts are anticipated for Phase 1. However, prior to any disturbances within the river channel and banks, turbidity barriers, and/or cofferdams shall be in place around the work areas and functioning as intended. Excavated soil and stone materials shall be stockpiled in the construction staging areas for re-use or disposal, and shall only be placed in areas contained by adequate perimeter erosion and sediment controls.
12. **Bridge Wingwall Removal and Related Work:** Complete removal of bridge wingwalls, guardrails and any other Phase 1 work, as specified in the Contract Plans. Prior to any disturbances within the river channel or on the river banks, turbidity barriers and/or cofferdams shall be in place and operating to limit water within the respective work areas and contain sediment.

During any demolition work, the Contractor shall also ensure that no excess concrete or associated debris is allowed to pass into downstream surface waters during these operations.

13. **Temporary Stabilization of Disturbed Areas:** The disturbed portion of riverbed and banks will be temporarily stabilized in accordance with the Contract Plans. Turbidity barriers and/or cofferdams shall remain in place and functioning until all disturbed areas are stabilized.

All disturbed surfaces in the river and on the banks below the ordinary high water line shall be stabilized, per the Contract Plans or as directed by the Resident Engineer, with stone fill, permanent seed, and mulch, or erosion matting, where required for slopes steeper than 3:1 or where erosion, washout, or scouring may be a concern. Once this condition is achieved, the turbidity barriers and/or cofferdams can be removed.

Upon completion of work in each site area, all disturbed areas must be adequately stabilized.

14. **Remove Temporary Access Roads and/or Staging Areas:** Remove all temporary construction access roads, staging areas, cofferdams, and dewatering measures once work is completed in these areas, unless these measures will be utilized in subsequent project phases.
15. **Final Stabilization:** Installation of final stabilization measures are not anticipated during Phase 1, or until subsequent phases of this project.

16. **On-going Monitoring and Maintenance Activities:** The Contractor shall continuously inspect and maintain all erosion and sediment control measures. Additional inspections shall be required by the On-Site Plan Coordinator and/or EPSC Plan Monitor on a weekly basis and after every rain event in which runoff is discharged from the site. The following Best Management Practices (BMPs) measures are recommended throughout duration of construction:

- The On-Site Plan Coordinator should utilize Accuweather website ([www.accuweather.com](http://www.accuweather.com)) or other appropriate service to predict precipitation events that could impact stream flows and erosion controls. The Contractor shall be prepared to install all erosion and sediment controls prior to rain events.
- The Contractor shall have all necessary erosion control equipment and materials, including mulch and mulching equipment, on-site for the duration of work in order to stabilize disturbed slopes, inlets, outlets, and any other areas of potential concern.
- Maintain dust control in current work area at all times.
- Unpaved roadway areas intended for overnight travel shall be treated with water or another approved dust control product (e.g., Calcium Chloride) prior to the end of the work day.
- Continuously inspect and maintain all stormwater, erosion, and sediment control measures throughout construction, until disturbed areas have been stabilized.
- Remove trapped sediment from erosion and sediment control measures as appropriate for each type of BMP utilized, and as directed.
- Monitoring of the EPSC and erosion controls shall continue prior to, during, and after weather conditions that could cause erosion and or sedimentation issues. The Contractor shall also anticipate the need to return to the site to address any deficiencies, as directed, on a very short time frame.

**Off-Site Activities:** All work related to this project is anticipated to be within the bounds of the VTrans ROW with the exception of temporary access and staging areas where there is inadequate room for the necessary construction activities. It is the responsibility of the Contractor to secure authorization for access on adjacent properties as necessary to allow work to be undertaken outside the ROW.

The project will generate a limited amount of vegetation from tree clearing activities and typical construction related debris. Any debris that requires removal from the project site will be disposed of by the Contractor in accordance with any applicable laws and regulations. All excavated soil materials (such as topsoil, soil, boulders, rock, etc.) will remain on-site and shall be utilized in final grading and stabilization of disturbed areas, to the extent possible. It is anticipated that the Contractor will need to import limited volumes of stone fill to establish finished grades within the work areas.

The Contractor intends to utilize two off-site abutting areas for construction staging and storage of equipment and materials, as identified on the two “Off-Site

Activity Submittal” forms included in Appendix D. The two off-site areas include the McGuffin property, an off-site vacant field to the southeast of the project area, and the Knowles property, a private residential property to the southwest of the site. Each of these sites have been reviewed and approved by VTrans, and the property owners have agreed to allow the Contractor to use the properties. The Contractor shall adhere to all applicable conditions of this approval, including installation, maintenance, and monitoring of general erosion and sediment controls at this location, as necessary, and in accordance with this EPSC Plan. Additional erosion and sediment control requirements have been incorporated into the construction sequence in Item No. 9, 13, and 14 of Section 1.5 above.

**EPSC Plan Updates:** The EPSC Plan is a document that must be amended to reflect changes occurring at the site. Revisions to the EPSC Plan may include additions of new BMPs, replacement of failed BMPs, significant changes in the activities or their timing on the project, changes in personnel, changes in inspection and maintenance procedures, and updates to the site plans. All revisions to the EPSC Plan should be documented on the revision documentation form provided in Appendix E.

If construction activities or design modifications are made that could impact the measures shown on the enclosed EPSC Plans, this EPSC Plan and this narrative will be amended appropriately, and include a description of the new activities, and the planned erosion control measures to be implemented.

## 1.6 Contact Information/Responsible Parties

<i><b>VTRANS PROJECT CONTACT</b></i>	<i><b>PHONE/FAX/MOBILE</b></i>	<i><b>ADDRESS</b></i>
Chris Williams, Resident Engineer VTrans Construction	Mobile: (802) 498-4170	Field Office: 42 North Main Street Rochester, Vermont 05767
Jennifer Fitch, Project Manager VTrans Structures	Phone: (802) 828-3042 Fax: (802) 828-3566	One National Life Drive Montpelier, Vermont 05633-5001
William H. Farley, P.E., CPESC Assistant Construction Environmental Engineer VTrans Construction	Phone: (802) 828-5483 Fax: (802) 828-2795 Mobile: (802) 279-8143	
<i><b>CONTRACTOR and EPSC CONTACT</b></i>		
Kevin Ture, Project Manager W.M. Schultz Construction, Inc.	Phone: (518) 885-0060 X221 Fax: (518) 885-0744 Mobile: (518) 956-0255	Post Office Box 2620 Ballston Spa, New York 12020
<i><b>ON-SITE PLAN COORDINATOR and EMERGENCY 24-HOUR CONTACT</b></i>		
Tim Downes, Site Superintendent W.M. Schultz Construction, Inc.	Phone: (518) 885-0060 Fax: (518) 885-0744 Mobile: (518) 867-7425	Post Office Box 2620 Ballston Spa, New York 12020
Tom Jackson, On-Site Plan Coordinator W.M. Schultz Construction, Inc.	Phone: (518) 885-0060 Fax: (518) 885-0744 Mobile: (518) 867-5986	
<i><b>EPSC PLAN PREPARER and MONITOR (AS NEEDED)</b></i>		
Scott A. Williams, P.E. (VT#8952) Pathways Consulting, LLC	Phone: (603) 448-2200 Fax: (603) 448-1221 Mobile: (203) 722-5690	240 Mechanic Street, Suite 100 Lebanon, New Hampshire 03766

### **EPSC Responsibilities:**

The On-Site Plan Coordinator shall be responsible for the following duties:

- Compliance with the EPSC Plan and other applicable documents.
- Implementing the EPSC Plan, committing resources to implement BMPs.
- Training of all staff and subcontractors as necessary to make them aware of the BMPs, control measures, and good-housekeeping procedures that must be implemented on the project site.
- Installing structural stormwater controls.
- Supervising and implementing good housekeeping programs, such as site cleanup and disposal of trash and debris, hazardous material management and disposal, and vehicle and equipment maintenance.
- Daily monitoring of the site conditions, erosion and stormwater controls, and BMPs in accordance with the Contract documents, VTrans Standard Specifications, and approved EPSC Plan requirements.
- Conducting routine inspections of the site to ensure all BMPs are being implemented and maintained, and follow-up reporting using the Inspection form provided in Appendix C.
- Maintaining the BMPs.
- Documenting changes to the EPSC Plan using the form in Appendix E.
- Communicating changes in the EPSC Plan to people working on the site.
- Subcontractor compliance with the EPSC Plan.

The EPSC Plan Monitor shall be responsible for the following duties:

- Conducting periodic (as needed) monitoring of the site conditions, erosion and stormwater controls, BMPs in accordance with the approved EPSC Plan requirements, and follow-up reporting using the Inspection form provided in Appendix C.
- Recommendations relating to EPSC Plan and BMPs.

## **1.7 Schedule**

The project is scheduled for start with mobilization and site setup around early June 2014 with actual construction beginning shortly thereafter. Final completion is scheduled for October 31, 2014.

The specific schedule for construction activities at the site location are not known at this time, but the Contractor has provided a preliminary schedule of all project related activities. Once a more specific schedule is determined, dates should be added to this EPSC Plan, as appropriate.

## **1.8 Inspection Form**

The site shall be monitored in accordance with the conditions of the approved EPSC Plan. The On-Site Plan Coordinator and/or EPSC Plan Monitor shall visit the site on a weekly basis and after every rain event to observe the conditions of surface water and erosion controls. The Inspection Form has been provided in Appendix C for use during all on-site inspections.

A maintenance inspection report will be made after each inspection by the On-Site Plan Coordinator and/or EPSC Plan Monitor. A copy of the completed form shall be filed with the VTrans, attached to this document for reference and tracking, and maintained on-site during the entire construction project. Following construction, the completed forms will be retained at the construction manager's office for a minimum of three (3) years.

## **2.0 EROSION PREVENTION AND SEDIMENT CONTROL PLANS**

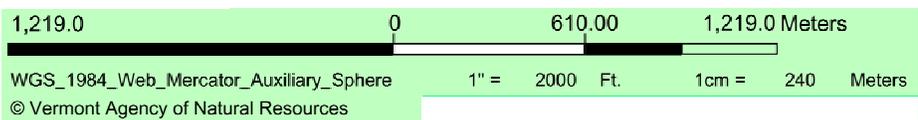
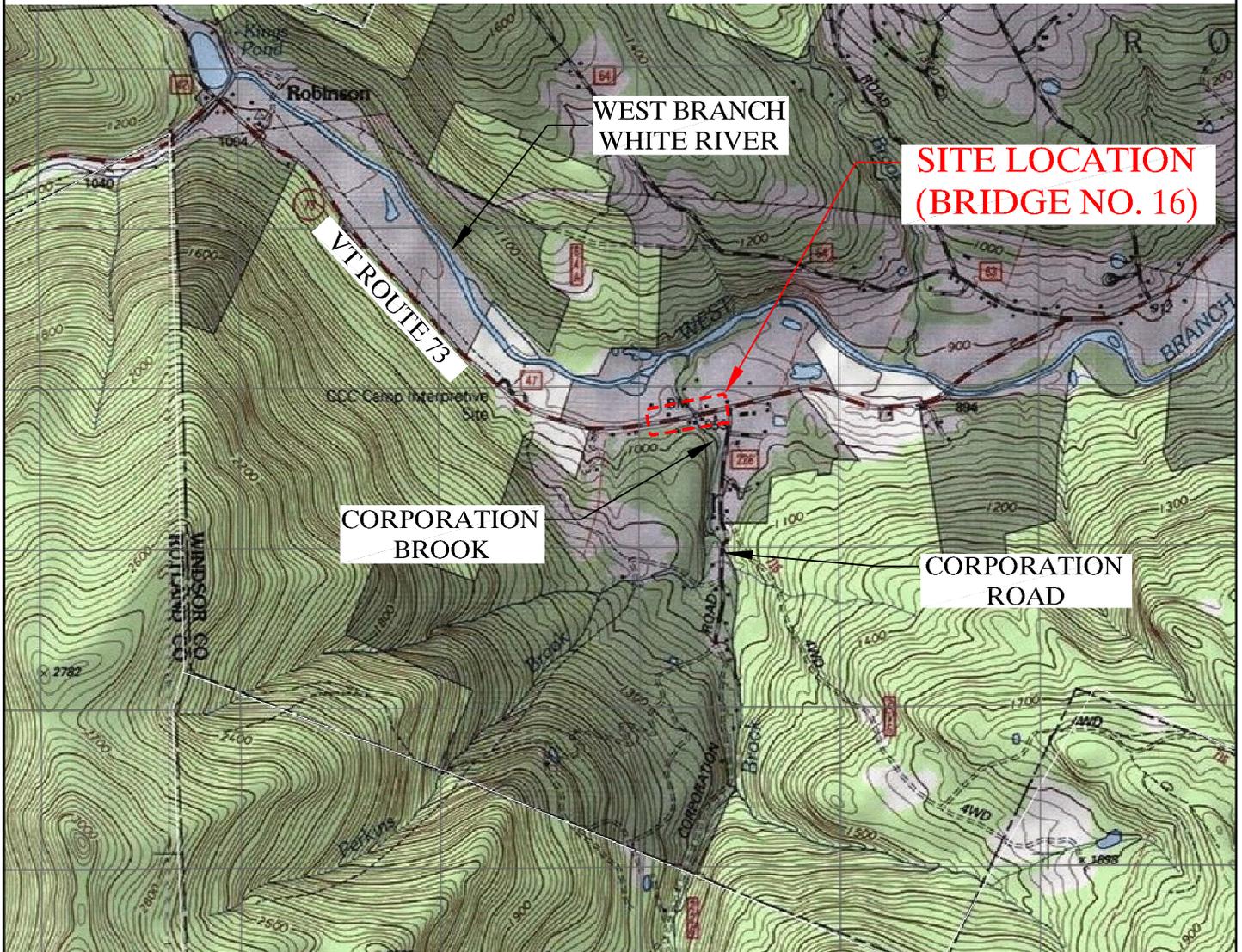
EPSC Plans for this project are included in Appendix B. The EPSC plans also include the following information:

- Direction(s) of stormwater flow and approximate slopes before and after major grading activities;
- Areas of soil disturbance;
- Areas that will not be disturbed;
- Natural features to be preserved;
- Locations of major structural and non-structural BMPs identified in the EPSC;
- Locations and timing of stabilization measures;
- Locations of storm drain inlets;
- Standard Erosion Control Specifications;
- Construction Sequencing;
- Winter Construction Notes; and
- Erosion Control Details.

This EPSC Plan document shall be updated during construction activities in order to identify each type of erosion and sediment control BMP that will be utilized.

## **APPENDICES**

**APPENDIX A  
SITE LOCATION MAP**



**LEGEND**

Pathways Consulting, LLC  
 240 Mechanic Street, Suite 100  
 Lebanon, New Hampshire 03766  
 (603) 448-2200 FAX: (603) 448-1221

SITE LOCATION MAP (BRIDGE 16) FOR  
**VTRANS ROCHESTER BRF 0162(17)**  
 VERMONT ROUTE 73, ROCHESTER, VERMONT

SCALE: AS SHOWN  
 DESIGNED BY: SAW  
 DRAWN BY: SAW  
 CHECKED BY: SAW  
 DATE: 06/04/14  
 PROJ. NO. 12455

**APPENDIX B  
EPSC PLANS**

**APPENDIX C**  
**INSPECTION FORM**

<b>Project Name:</b>			<b>Date:</b>		<b>Time Since Last Storm:</b>	
<b>Inspector:</b>			<b>On-Site Coordinator:</b>			
<b>Measure Inspected</b>	<b>Y</b>	<b>N</b>	<b>STA/Off</b>	<b>Corrective Action Taken (CAT)</b>	<b>Date CAT</b>	
<b>Boundary Limits</b>						
Site boundary markers are up and visible						
Disturbance is only occurring within marked boundaries						
<b>Limit Disturbance Area</b>						
Only acreage listed on <i>Authorization to Discharge</i> is disturbed at one time						
<b>Stabilize Construction Entrance/Exit</b>						
Off site tracking of sediment prevented						
<b>Sediment Barriers</b>						
Silt fence trenched into ground						
Accumulated sediment < 1/2 height of measure						
<b>Diversion</b>						
All upland stormwater is diverted around the work area						
<b>Check Dams</b>						
Check dams are in place and stretch the width of the channel						
Channels are stable with no erosion						
<b>Stabilize Exposed Soils</b>						
Seed and mulch, and/or matting placed in accordance w/ permit requirements						
Soil is seeded and mulched or covered in erosion matting within 48 hours of final grade						
<b>Winter Stabilization</b>						
After Sept. 15' all disturbed areas are seeded & mulched to 3" deep or covered w/ matting						
For ongoing construction, exposed soil is mulched prior to forecasted events						
<b>Dewatering Activities</b>						
Accumulated sediment is removed to allow sufficient treatment						

\* Additional Measures and Discharges shall be reported on the back side of this form.



**APPENDIX D**  
**OFF-SITE ACTIVITY RECORDS**

# OFF-SITE ACTIVITY REVIEW



## VTRANS ENVIRONMENTAL RESOURCE REVIEW

Project/District Name: Rochester BRF 0162(17) Proposed Area Name: W.M. Schultz Construction(Knowles)

Waste meters)  Borrow  Staging  Other X: 471882.34 Y: 149856.47 (NAD83)

### Natural Resource Review

Reviewer: Glenn Gingras, VTrans Biologist

Accepted  Rejected Date 05/13/14 Signature Glenn Gingras

Comments Project must obtain necessary permits from COE and ANR if additional impacts to waterway. Recommend spanning Corporation Brook.

### Cultural Resource Review

Reviewer: Brennan Gauthier

Accepted  Rejected Date 5/14/14 Signature Brennan Gauthier

Comments \_\_\_\_\_

The Site has been REJECTED for use at this time

The Contractor is advised to:

- Seek another site for use
- Hire an Environmental firm to \_\_\_\_\_
- Hire an Archeological consultant to clear Section 106 issues

This site has been ACCEPTED (Site does not warrant any special conditions)

This site has been ACCEPTED with the following conditions:

- Maintain a minimum buffer of \_\_\_\_\_ feet from \_\_\_\_\_
- Orange fencing must be installed to protect nearby resources \_\_\_\_\_
- Materials must be placed on geotextile fabric
- Use of this site must comply with applicable local/state/federal permitting regulations including but not limited to: US Corps of Engineers amendment, ANR permits.
- Please contact the Construction Environmental Engineer prior to use of this site.
- Other: \_\_\_\_\_

The VT ANR Low Risk Site Handbook for EPSC measures should be used as a minimum measure for best management practices at waste, borrow and staging sites.

A copy of this Review has been faxed to the Resident Engineer/District Tech  Yes  No

A copy of this Review has been delivered to the Construction Env Eng (CEE)  Yes  No

**This clearance is for the Natural and Cultural Resources Only.**

X = 471882.34 Y = 149856.47

## OFF-SITE ACTIVITY SUBMITTAL



- This form is to be completed in its entirety by the Contractor/District Tech when proposing any waste, borrow, or staging area or any work outside the defined Contract construction limits.
- Submit to Karen Spooner: [karen.spooner@state.vt.us](mailto:karen.spooner@state.vt.us), Phone: (802)828-2169, Fax: (802)828-2334, VTrans Program Development Division, Environmental Section, One National Life Drive, Montpelier, VT 05633-5001
- Submit a copy to the Resident Engineer
- Allow 21 calendar days (see Section 105.25 (c) of the VTrans Standard Specifications For Construction) for review once the application is administratively complete.

received  
5.13.14

**SUBMITTAL INFORMATION**

Project Name/District: ROCHESTER DIST (17) Contractor/District Tech: WM SCHULTZ CONST.

Contact: KEVIN TURE Phone: 518-885-0660 Fax: 518-885-0744 E-mail: KTURE@WMSCHULTZ.COM

Resident Engineer: CHRIS WILLIAMS Phone: 498-4100 Fax: \_\_\_\_\_

**PROPOSAL INFORMATION** (Select one type of area being proposed for use per submittal and describe associated characteristics)

Waste     Borrow     Staging     Other (ex. dewatering location): TENR DETOUR

Material: Type (asphalt, concrete, earthen, etc.) SUBBASE    Quantity (yds<sup>3</sup>) 100 CY

Total Area of Land Disturbance (sq ft) 2,500 SF

Additional Info: \_\_\_\_\_

**LANDOWNER/PROPERTY INFO** (Fill all applicable boxes; attach a Location Map and Sketch of Area)

Name: JOHN F. KNOWLES Address: 2473 RT 73 Rochester, VT Phone: 863-984-2564

Print Name: \_\_\_\_\_ or P.O. Box 944 - POIK CITY, VT 33808

Private Residential/Commercial     Town/State Owned Facility     Other

Additional Info: VACANT HOME - FOR SALE (Vacation Home)

Are there other users of this site?  Yes     No

Known past uses: HOME LOT

Location Map (must be USGS Geological Survey Map (7.5"))

Sketch of Area:  North arrow     Approx scale     Recognizable features

Permit Info:

Act 250 Permit Exists?  Yes     No    If Yes, # \_\_\_\_\_ Copy Enclosed?  Yes     No

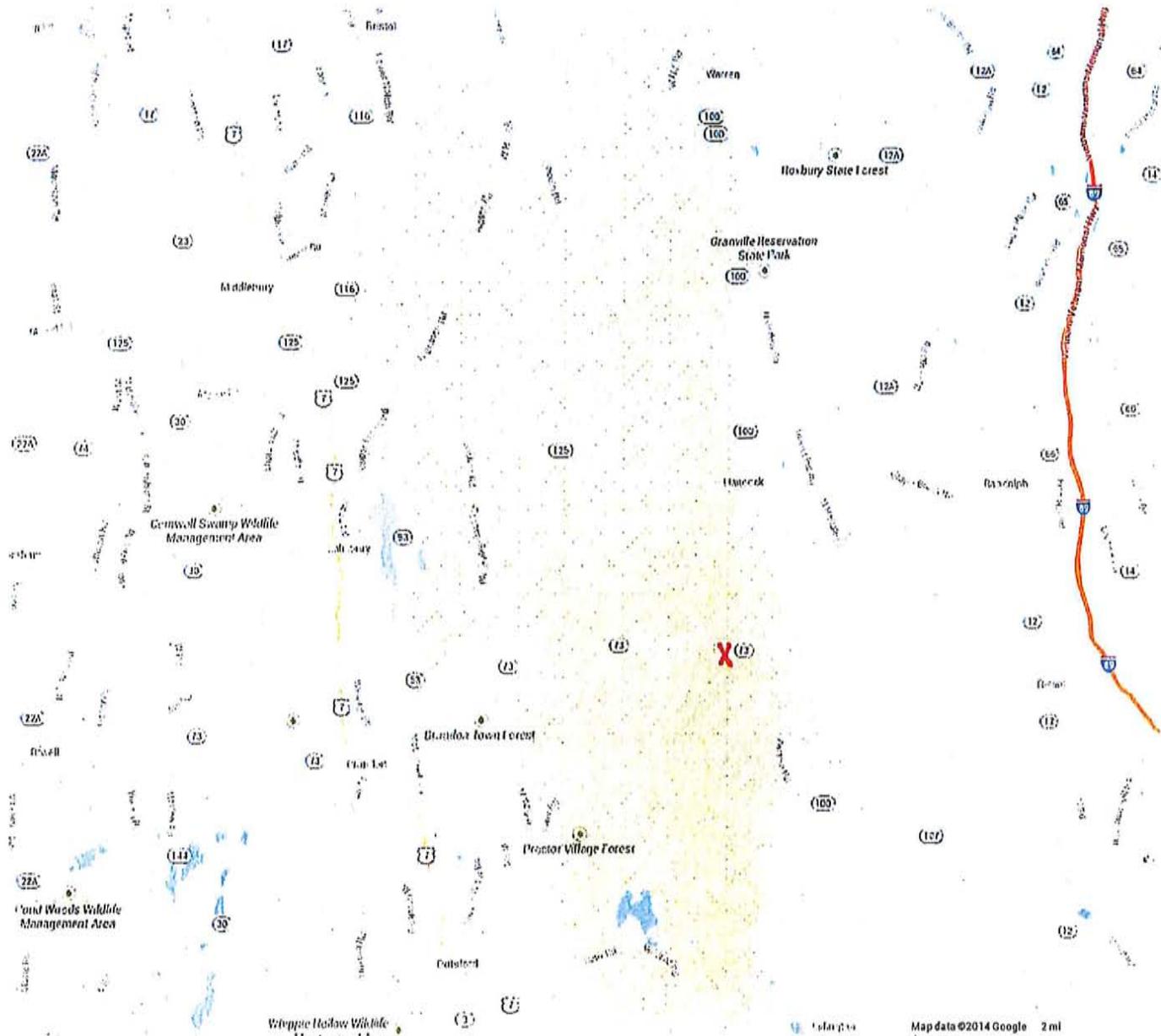
List of Other Existing Permits: \_\_\_\_\_

**Landowner Agreement** (Signature is required for all private-, town-, and state-owned properties)

I, John Knowles, warrant that the information in the above permit application is accurate and agree to the use of the proposed area by W.M. SCHULTZ CONST. as shown on the attached sketch. If acting as the agent of the Landowner, I warrant (1) that the Landowner has the full right, power, and authority to authorize the proposed use, (2) that I am authorized to act as the Landowner's agent, and (3) that my authority to act as the Landowner's agent has not been revoked.

Date: 5/5/2014

**This clearance is for the Natural and Cultural Resources Only.**



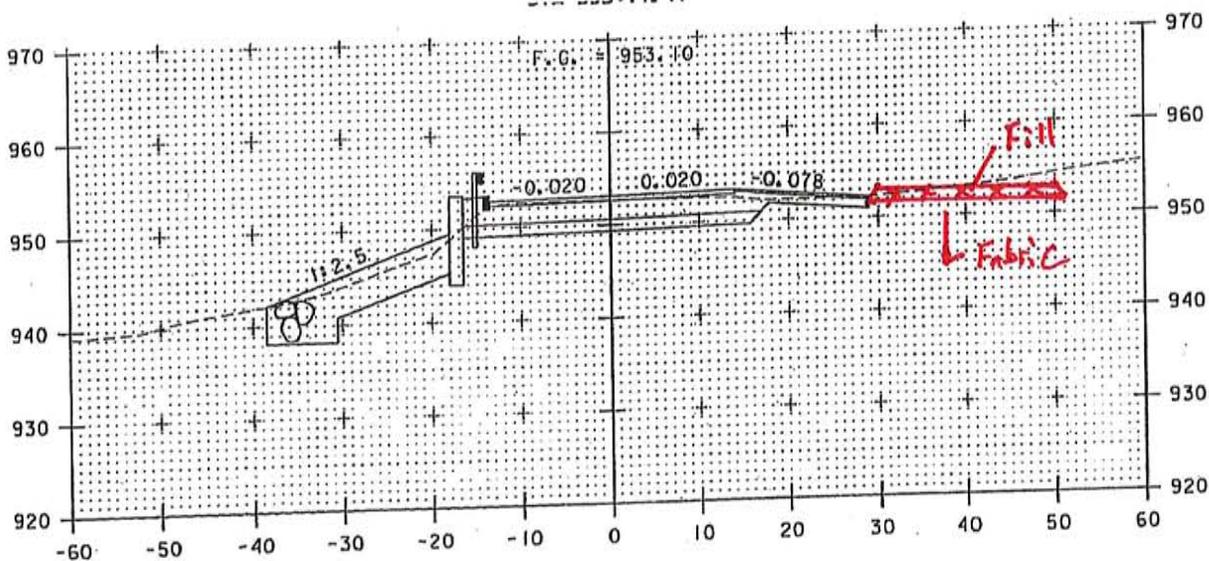


Google earth



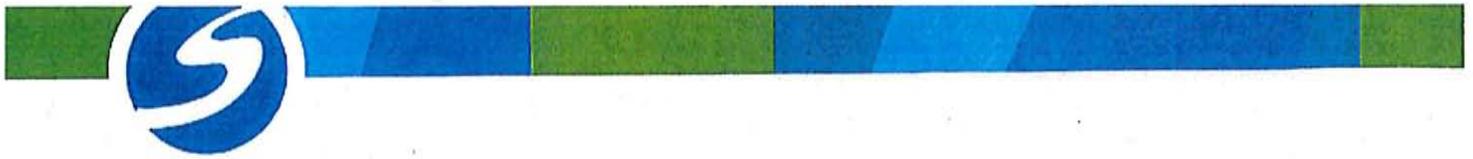
N ←

Section A Proposed Detour



333+64 DRIVE, RT

PROJECT NAME:	ROCHESTER	PLOT DATE:	9/3/2013
PROJECT NUMBER:	BRF 0162(17)	DRAWN BY:	C.L. CILLEY
FILE NAME:	z85e035xsl.dgn	CHECKED BY:	G.S. GOODRICH
PROJECT LEADER:	G.S. GOODRICH	SHEET	162 OF 238
DESIGNED BY:	C.L. CILLEY		
BR 16 VT 73 CROSS SECTIONS (1 OF 2)			



# SCHULTZ

Date: 5/12/14

To: Karen Spooner, VTRANS

From: Mike Garn

Subject: Rochester ER BFR 0162 (17) Bridge 16  
Offsite Activity Submittal – Lands of John Knowles

Karen,

Attached please find our Offsite Activity Submittal for the Lands of John Knowles. This submittal is a request to use the area outside of the plan construction limits for a proposed detour. If W M Schultz does not use this requested area as a detour we would intend to utilize it as additional access and staging.

The area highlighted in Red on the plan sheet depicts the disturbance area outside the contract temporary construction limit line (approx. 2,500 sf). All disturbed areas will be returned to natural conditions at project completion.

Kindly let us know if any additional information will be required to process this submittal.

Thank you,

Mike Garn

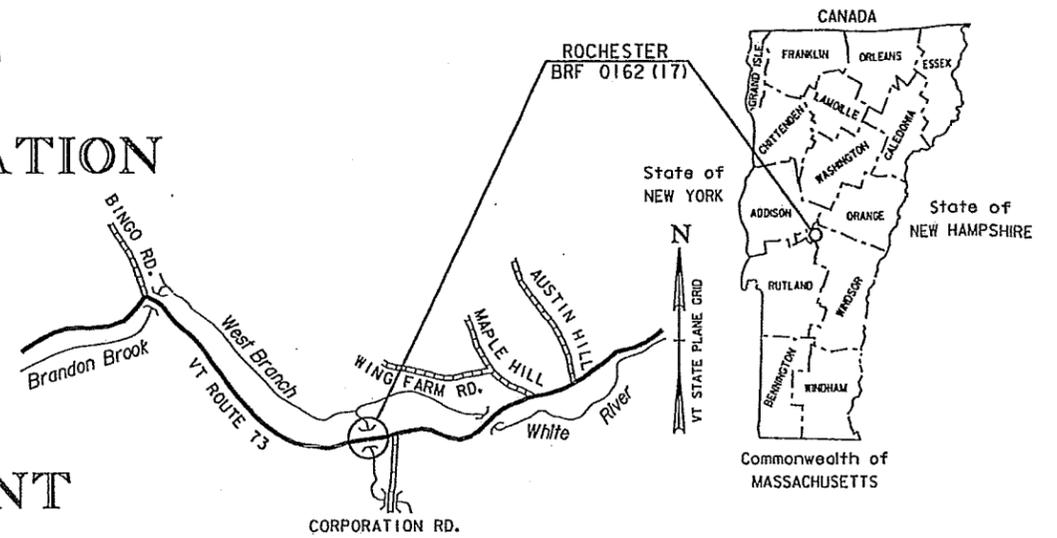
Assist. Project Manager

# STATE OF VERMONT AGENCY OF TRANSPORTATION



## PROPOSED IMPROVEMENT BRIDGE PROJECT

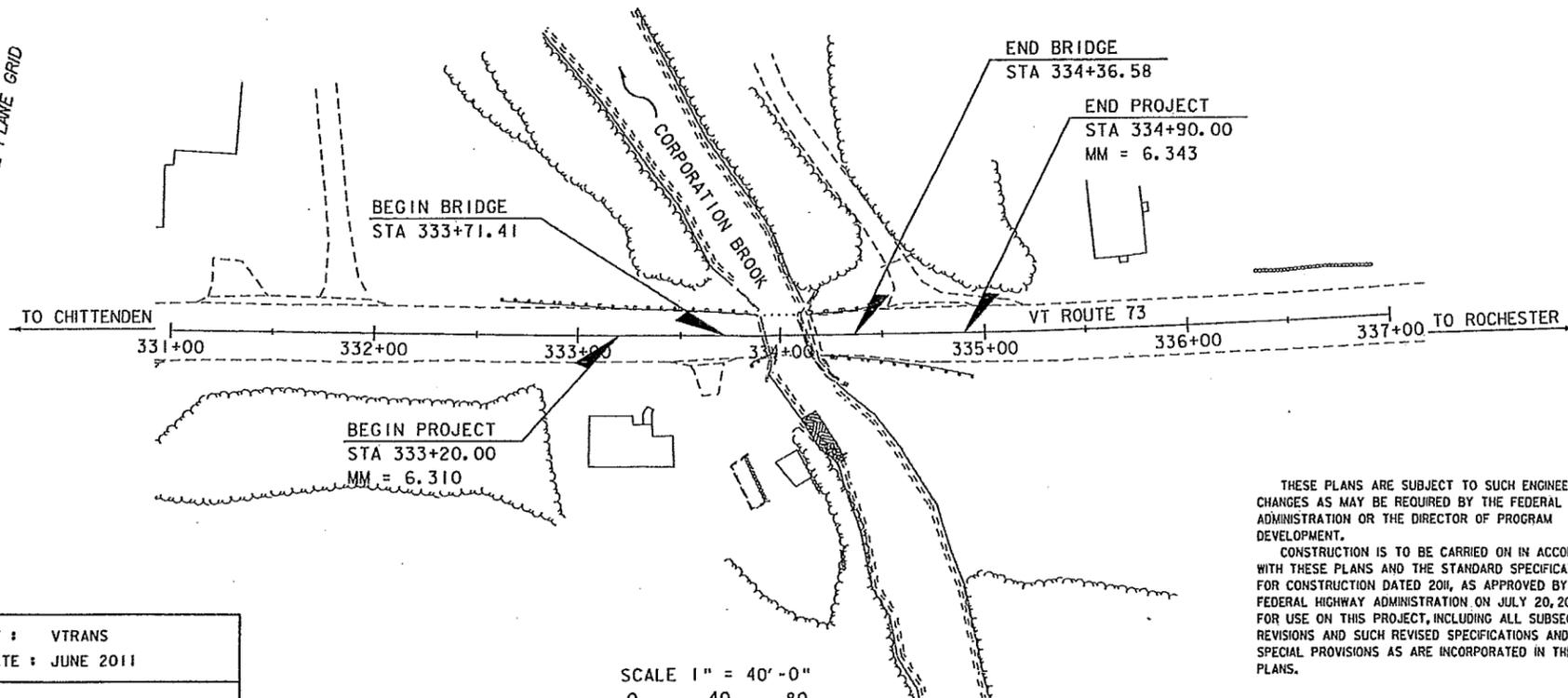
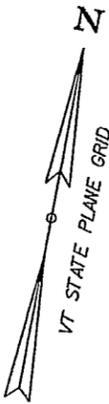
TOWN OF ROCHESTER  
COUNTY OF WINDSOR  
VT ROUTE 73 (RURAL MAJOR COLLECTOR), BRIDGE NO 16



**PROJECT LOCATION:** LOCATED IN THE COUNTY OF WINDSOR, TOWN OF ROCHESTER, ON VT 73; BRIDGE NO 16 OVER CORPORATION BROOK, APPROXIMATELY 2.50 MILES WEST OF THE INTERSECTION WITH VT 73 AND VT 100.

**PROJECT DESCRIPTION:** WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL AND REPLACEMENT OF EXISTING BRIDGE NO 16 ON THE EXISTING ALIGNMENT, WITH ASSOCIATED ROADWAY AND CHANNEL WORK.

**LENGTH OF STRUCTURE:** 65.17 FT  
**LENGTH OF ROADWAY:** 104.83 FT  
**LENGTH OF PROJECT:** 170.00 FT



QUALITY ASSURANCE PROGRAM: LEVEL 2

### CONVENTIONAL SYMBOLS

COUNTY LINE	
TOWN LINE	
LIMITS OF ACCESS	
POINT OF ACCESS	
FENCE LINE	
STONE WALL	
TRAVELED WAY	
GUARD RAIL	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	
TOP OF CUT	
TOE OF SLOPE	

SURVEYED BY : VTRANS  
SURVEYED DATE : JUNE 2011

DATUM  
VERTICAL NAVD 88  
HORIZONTAL NAD 83 (07)

SCALE 1" = 40'-0"  
0 40 80

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

PROJECT MANAGER : JENNIFER M.V. FITCH, P.E.

PROJECT NAME : ROCHESTER  
PROJECT NUMBER : BRF 0162 (17)

SHEET 121 OF 238 SHEETS



**GUARDRAIL APPROACH SECTION,  
GALVANIZED 2 RAIL BOX BEAM**  
 STA. 333+37 - 333+66 LT  
 STA. 333+70 - 333+80 RT  
 STA. 334+28 - 334+52 LT  
 STA. 334+42 - 334+71 RT

**BRIDGE RAILING, GALVANIZED  
2 RAIL BOX BEAM**  
 STA. 333+66 - 334+28 LT  
 STA. 333+80 - 334+42 RT

**MANUFACTURED TERMINAL SECTION,  
TANGENT**  
 STA. 332+30 - 332+81 LT

**CONSTRUCT 8.0' PAVED APRON**  
 STA. 334+72, LT - 55.0' WIDE

**CONSTRUCT 5.0' PAVED APRON**  
 STA. 333+64, RT - 28.0' WIDE  
 STA. 335+06, RT - 16.5' WIDE

**CONSTRUCT 10.0' GRAVEL DRIVE**  
 STA. 334+66, LT - 10.0' WIDE

**CONSTRUCT 13.0' GRAVEL DRIVE**  
 STA. 333+64, RT - 13.0' WIDE

**CONSTRUCT 16.5' GRAVEL DRIVE**  
 STA. 335+06, RT - 16.5' WIDE

**CAST-IN-PLACE  
CONCRETE CURB, TYPE B**  
 STA. 333+34 - 333+67 LT  
 STA. 333+69 - 333+80 RT  
 STA. 334+28 - 334+50 LT  
 STA. 334+41 - 334+82 RT

**STEEL BEAM GUARDRAIL,  
GALVANIZED W/ 8 FEET POSTS**  
 STA. 332+81 - 333+37 LT  
 STA. 334+71 - 334+95, 21.2 RT

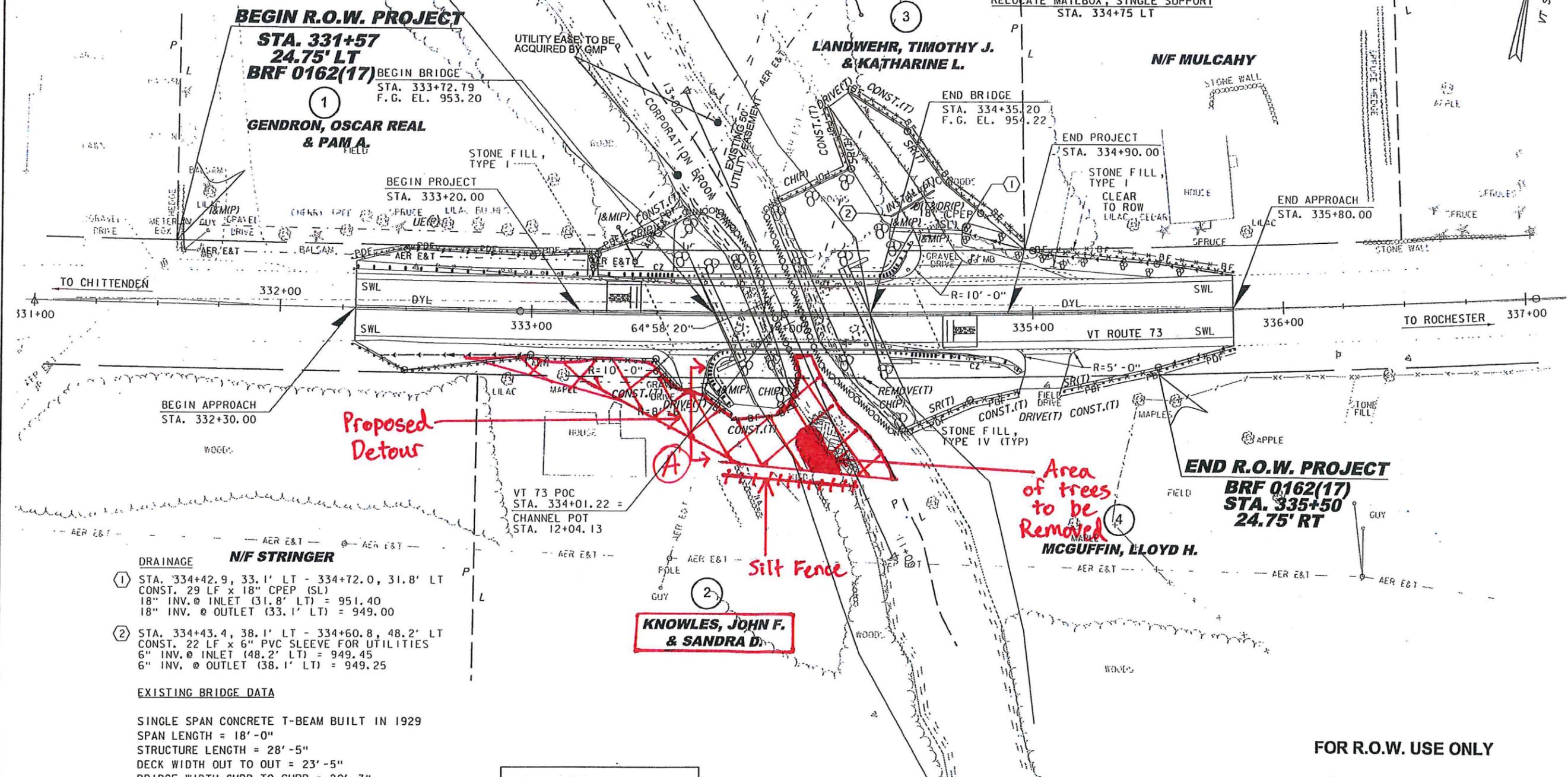
**REMOVAL AND DISPOSAL OF GUARDRAIL**  
 STA. 332+61 - 333+88 LT  
 STA. 333+84 - 333+94 RT  
 STA. 334+15 - 334+52 RT  
 STA. 334+21 - 334+94 LT

**LIMITS OF COLD PLANING**  
 STA. 332+30 - 332+80 LT & RT  
 STA. 335+30 - 335+80 LT & RT

**RELOCATE MAILBOX, SINGLE SUPPORT**  
 STA. 334+75 LT

**EDGE OF PAVEMENT ROADWAY WIDTH TRANSITION**  
 STA. 332+80 = 13.32 LT & 13.07 RT  
 STA. 332+97 = 14.00 LT  
 STA. 333+04 = 14.00 RT  
 STA. 334+99 = 14.00 LT  
 STA. 335+13 = 14.00 RT  
 STA. 335+30 = 12.76 LT & 14.68 RT

**STONE FILL, TYPE I**  
 STA. 332+24 - 332+60 LT  
 STA. 334+72, 31.8 LT - 335+80, 13.2 LT



**DRAINAGE N/F STRINGER**

① STA. 334+42.9, 33.1' LT - 334+72.0, 31.8' LT  
 CONST. 29 LF x 18" CPEP (SL)  
 18" INV. @ INLET (31.8' LT) = 951.40  
 18" INV. @ OUTLET (33.1' LT) = 949.00

② STA. 334+43.4, 38.1' LT - 334+60.8, 48.2' LT  
 CONST. 22 LF x 6" PVC SLEEVE FOR UTILITIES  
 6" INV. @ INLET (48.2' LT) = 949.45  
 6" INV. @ OUTLET (38.1' LT) = 949.25

**EXISTING BRIDGE DATA**

SINGLE SPAN CONCRETE T-BEAM BUILT IN 1929  
 SPAN LENGTH = 18'-0"  
 STRUCTURE LENGTH = 28'-5"  
 DECK WIDTH OUT TO OUT = 23'-5"  
 BRIDGE WIDTH CURB TO CURB = 20'-3"

LINES SHOWN ON THIS PLAN AS EXISTING  
 PROPERTY LINES P/L ARE BELIEVED TO  
 BE ACCURATE BUT SHOULD NOT BE RELIED  
 UPON FOR PURPOSES UNRELATED TO THE  
 STATE OF VERMONT'S ACQUISITION OF LAND  
 AND RIGHTS FOR THIS PROJECT.



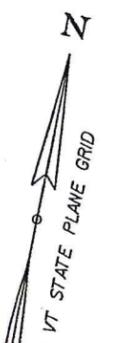
**FOR R.O.W.  
USE ONLY**

**FOR R.O.W. USE ONLY**

PROJECT NAME: ROCHESTER  
 PROJECT NUMBER: BRF 0162(17)

FILE NAME: r85e035.layout.dgn  
 PROJECT LEADER: J. FITCH  
 DESIGNED BY: C.L. CILLEY  
 ROW LAYOUT SHEET 1 OF 1

PLOT DATE: 25-MAR-2013  
 DRAWN BY: J. BLANCHARD  
 CHECKED BY: H. PETROVS  
 SHEET 173 OF 238



# OFF-SITE ACTIVITY REVIEW



## VTRANS ENVIRONMENTAL RESOURCE REVIEW

**Project/District Name:** Rochester BRF 0162(17) **Proposed Area Name:** W.M. Schultz Construction(McGuffin )

Waste (meters)     Borrow     Staging     Other    X: 471901.79 Y: 149860.18 (NAD83)

**Natural Resource Review**    Reviewer: Glenn Gingras, VTrans Biologist

Accepted     Rejected    Date 05/13/14    Signature Glenn Gingras

Comments Project must obtain necessary permits from COE and ANR if additional impacts to waterway. Recommend spanning Corporation Brook.

**Cultural Resource Review**    Reviewer: Brennan Gausler

Accepted     Rejected    Date 5/16/14    Signature Brennan Gausler

Comments \_\_\_\_\_

**The Site has been REJECTED for use at this time**

The Contractor is advised to:

- Seek another site for use
- Hire an Environmental firm to \_\_\_\_\_
- Hire an Archeological consultant to clear Section 106 issues

**This site has been ACCEPTED** (Site does not warrant any special conditions)

**This site has been ACCEPTED with the following conditions:**

- Maintain a minimum buffer of \_\_\_\_\_ feet from \_\_\_\_\_
- Orange fencing must be installed to protect nearby resources \_\_\_\_\_
- Materials must be placed on geotextile fabric
- Use of this site must comply with applicable local/state/federal permitting regulations including but not limited to: US Corps of Engineers amendment, ANR permits.
- Please contact the Construction Environmental Engineer prior to use of this site.
- Other: \_\_\_\_\_

The VT ANR Low Risk Site Handbook for EPSC measures should be used as a minimum measure for best management practices at waste, borrow and staging sites.

A copy of this Review has been faxed to the Resident Engineer/District Tech     Yes     No

A copy of this Review has been delivered to the Construction Env Eng (CEE)     Yes     No

**This clearance is for the Natural and Cultural Resources Only.**

x = 471901.79 y = 149860.18

### OFF-SITE ACTIVITY SUBMITTAL



- This form is to be completed in its entirety by the Contractor/District Tech when proposing any waste, borrow, or staging area or any work outside the defined Contract construction limits.
- Submit to Karen Spooner: [karen.spooner@state.vt.us](mailto:karen.spooner@state.vt.us), Phone: (802)828-2169, Fax: (802)828-2334, VTrans Program Development Division, Environmental Section, One National Life Drive, Montpelier, VT 05633-5001
- Submit a copy to the Resident Engineer
- Allow 21 calendar days (see Section 105.25 (c) of the VTrans Standard Specifications For Construction) for review once the application is administratively complete.

**received**  
5.13.14

▪ SUBMITTAL INFORMATION Bridge 16

Project Name/District: Rochester BRF 0162(17) Contractor/District Tech: W.M. Schultz Const.  
 Contact: Kevin Ture Phone: 518-956-0255 Fax: 518-885-0744 E-mail: Kture@wmschultz.com  
 Resident Engineer: Chris Williams Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

▪ PROPOSAL INFORMATION (Select one type of area being proposed for use per submittal and describe associated characteristics)

Waste     Borrow     Staging     Other (ex. dewatering location): Potential Detour  
 Material: Type (asphalt, concrete, earthen, etc.) Earthen    Quantity (yds<sup>3</sup>) 320 cy +/-  
 Total Area of Land Disturbance (sq ft) 18,750 SF +/-  
 Additional Info: Stage Materials & Equipment. May Build Temporary Road Detour

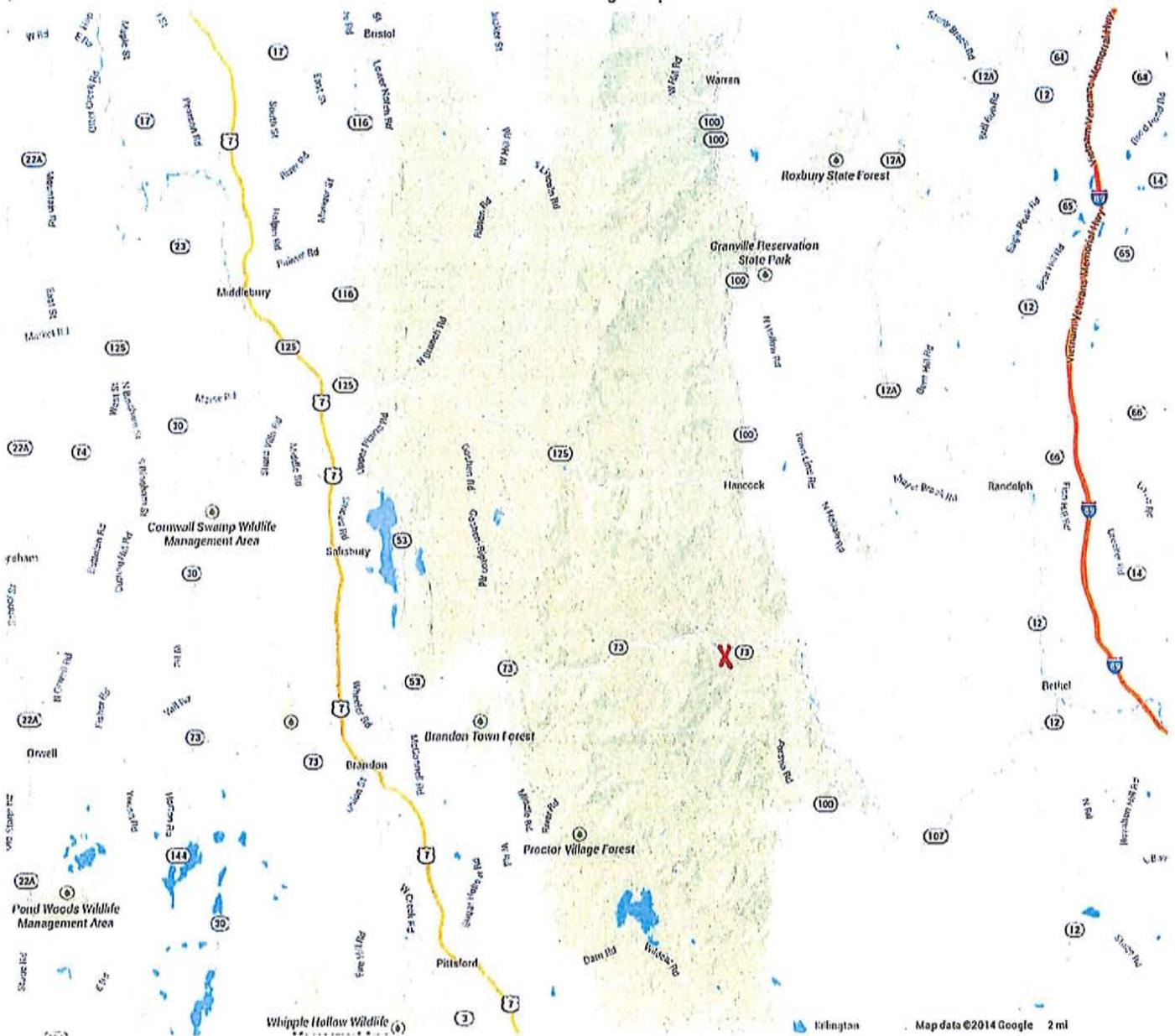
▪ LANDOWNER/PROPERTY INFO (Fill all applicable boxes; attach a Location Map and Sketch of Area)

Name: LLOYD MCGUFFIN Address: 2270 BRANDON MTN. RD. Phone: 802-767-3715  
 Print Name  
 Private Residential/Commercial     Town/State Owned Facility     Other  
 Additional Info: \_\_\_\_\_  
 Are there other users of this site?     Yes     No  
 Known past uses: \_\_\_\_\_  
 Location Map (must be USGS Geological Survey Map (7.5'))  
 Sketch of Area     North arrow     Approx scale     Recognizable features  
 Permit Info:  
 Act 250 Permit Exists?     Yes     No    If Yes, # \_\_\_\_\_ Copy Enclosed?     Yes     No  
 List of Other Existing Permits: \_\_\_\_\_

Landowner Agreement (Signature is required for all private-, town-, and state-owned properties)

I, Lloyd McGuffin, warrant that the information in the above permit application is accurate and agree  
 Landowner/Facility Manager Signature  
 to the use of the proposed area by WM Schultz as shown on the attached sketch. If acting as the agent of  
 Name of Contractor  
 the Landowner, I warrant (1) that the Landowner has the full right, power, and authority to authorize the proposed use, (2) that I am authorized to act as the Landowner's agent, and (3) that my authority to act as the Landowner's agent has not been revoked.  
 Date: 5/1/14

**This clearance is for the Natural and Cultural Resources Only.**



161.771-4971.21  
Rochester, VT 05767 - approximate address

HDV1 Street View - Aug 2012

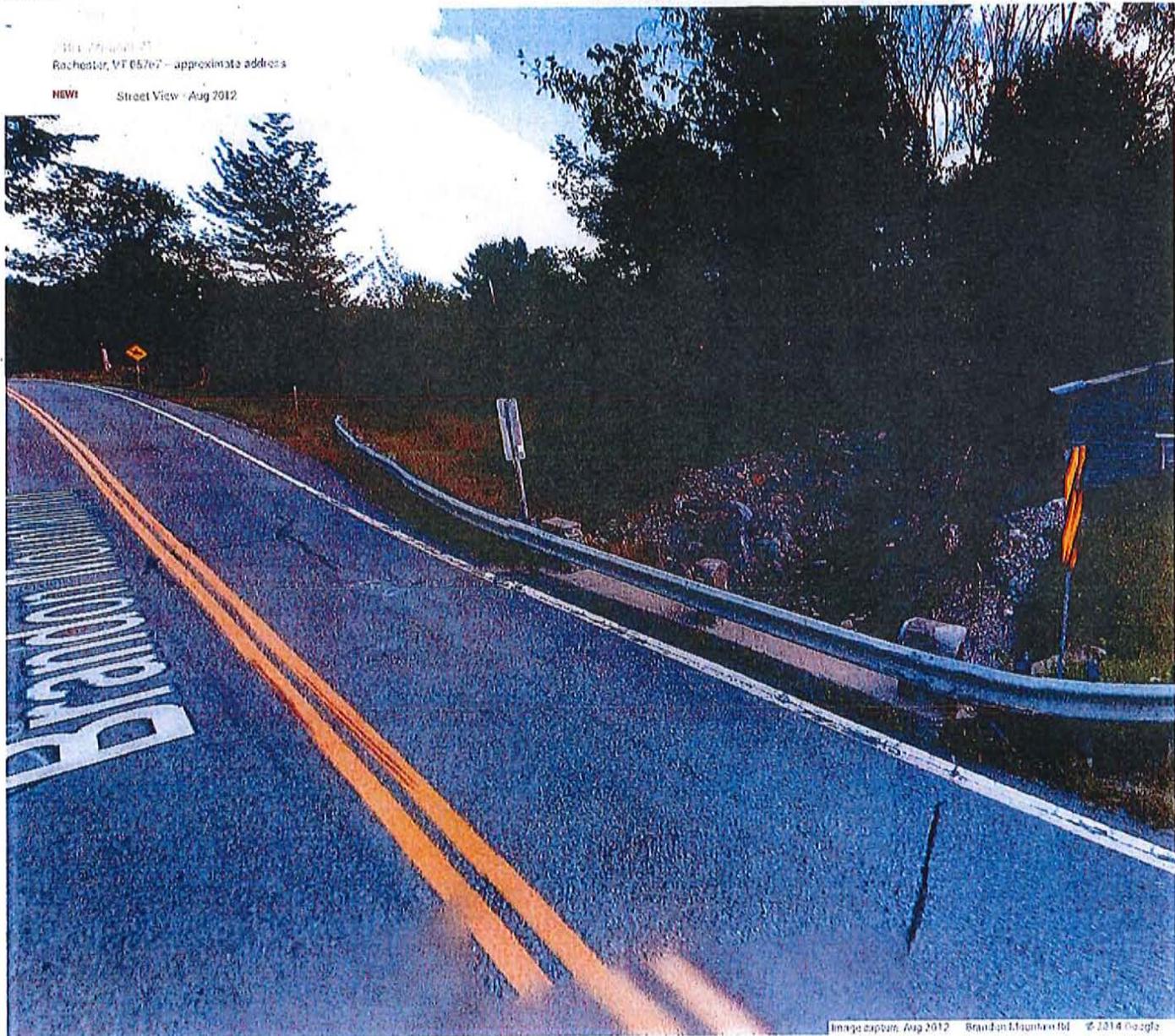
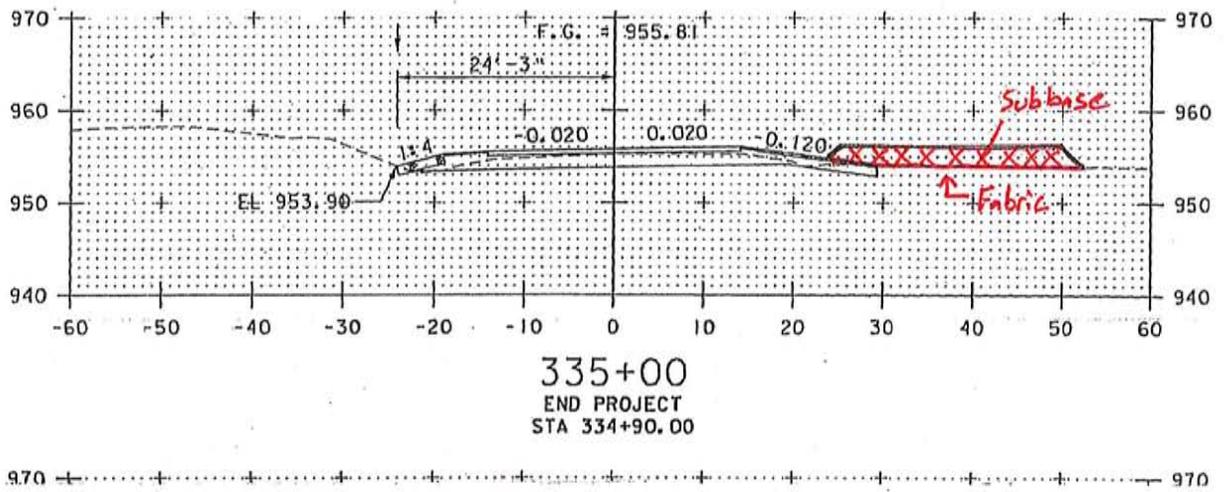


image capture: Aug 2012 Brandon L. Lounsbury © 2014 Google

N ←

### Section A

### Proposed Detour





**SCHULTZ**

Date: 5/12/14

To: Karen Spooner, VTRANS

From: Mike Garn

Subject: Rochester ER BFR 0162 (17) Bridge 16  
Offsite Activity Submittal – Lands of Lloyd McGuffin

Karen,

Attached please find the Offsite Activity Submittal for the Lands of Lloyd McGuffin. This submittal is to request to use a small portion of land for a proposed detour, details submitted under separate cover. If W M Schultz does not implement the detour we intend to use that portion as additional access and staging. The remaining area will be used for a material and equipment stockpile / staging area.

The area highlighted in Red on the plan sheet depicts the disturbance area outside the contract temporary construction limit line (approx. 18,750 sf). All disturbed area will be returned to natural conditions at project completion.

Kindly let us know if any additional information will be required to process this submittal.

Thank you

  
Mike Garn

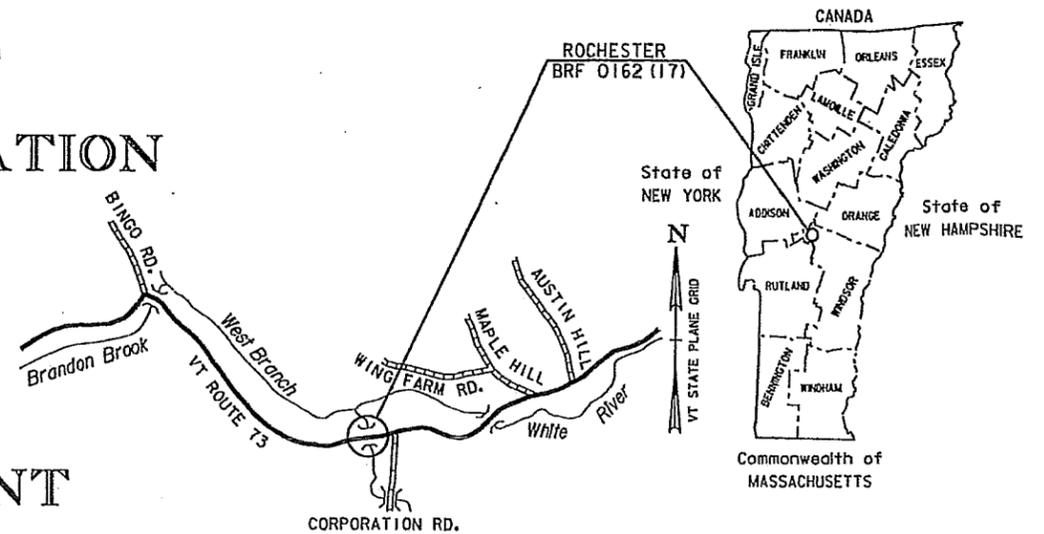
Assist. Project Manager

# STATE OF VERMONT AGENCY OF TRANSPORTATION



## PROPOSED IMPROVEMENT BRIDGE PROJECT

TOWN OF ROCHESTER  
COUNTY OF WINDSOR  
VT ROUTE 73 (RURAL MAJOR COLLECTOR), BRIDGE NO 16

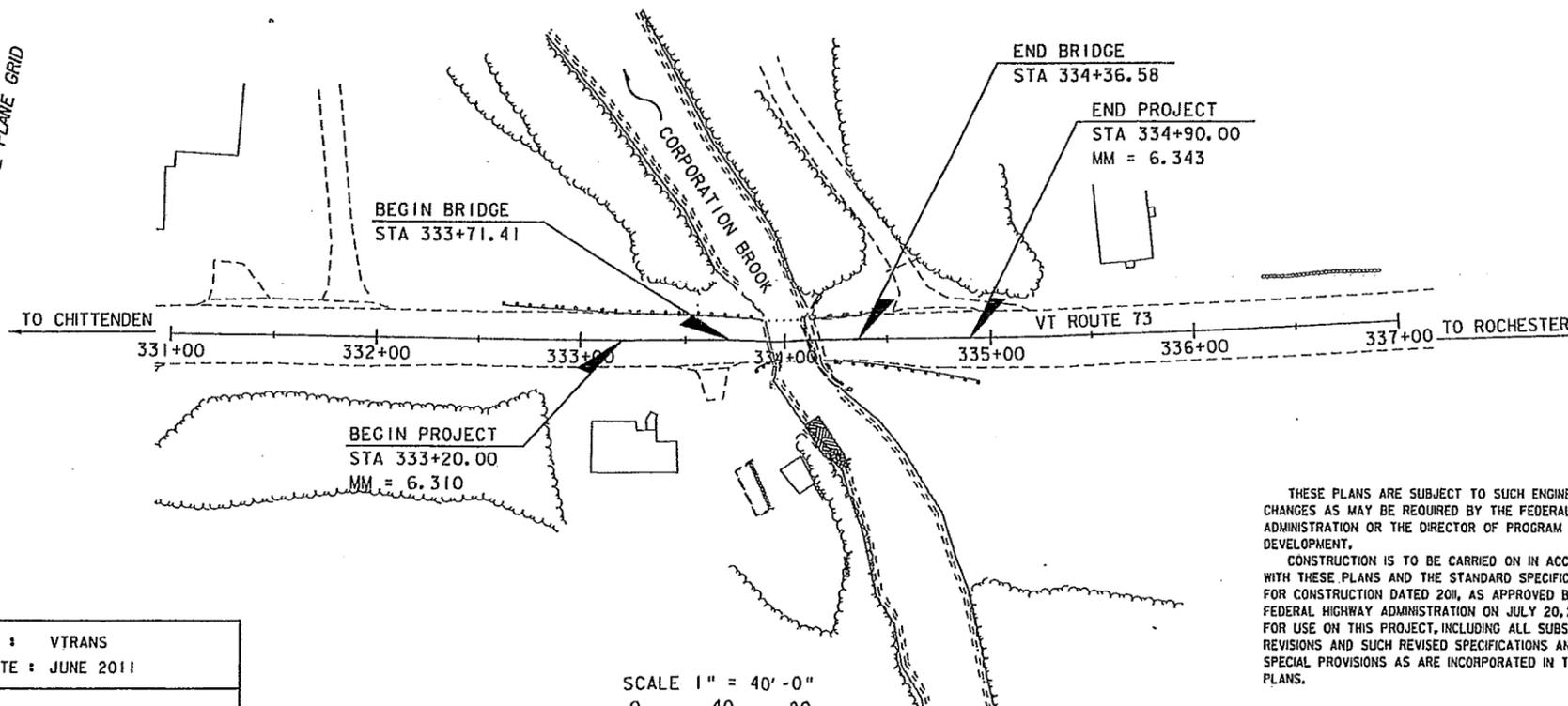
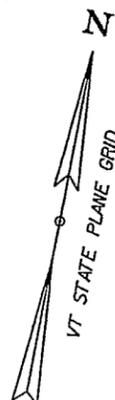


LOCATION MAP  
NOT TO SCALE

**PROJECT LOCATION:** LOCATED IN THE COUNTY OF WINDSOR, TOWN OF ROCHESTER, ON VT 73; BRIDGE NO 16 OVER CORPORATION BROOK, APPROXIMATELY 2.50 MILES WEST OF THE INTERSECTION WITH VT 73 AND VT 100.

**PROJECT DESCRIPTION:** WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL AND REPLACEMENT OF EXISTING BRIDGE NO 16 ON THE EXISTING ALIGNMENT, WITH ASSOCIATED ROADWAY AND CHANNEL WORK.

**LENGTH OF STRUCTURE:** 65.17 FT  
**LENGTH OF ROADWAY:** 104.83 FT  
**LENGTH OF PROJECT:** 170.00 FT



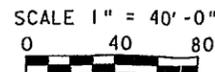
QUALITY ASSURANCE PROGRAM: LEVEL 2

### CONVENTIONAL SYMBOLS

COUNTY LINE		COUNTY LINE	
TOWN LINE		TOWN LINE	
LIMITS OF ACCESS			
POINT OF ACCESS			
FENCE LINE			
STONE WALL			
TRAVELED WAY			
GUARD RAIL			
RAILROAD			
SURVEY LINE			
CULVERT			
POWER POLE			
TELEPHONE POLE			
TREES			
CONTROL OF ACCESS			
PROPERTY LINE			
R.O.W. TAKING LINE			
SLOPE RIGHTS			
TOP OF CUT			
TOE OF SLOPE			

SURVEYED BY : VTRANS  
SURVEYED DATE : JUNE 2011

DATUM  
VERTICAL NAVD 88  
HORIZONTAL NAD 83 (07)



THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.  
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

PROJECT MANAGER : JENNIFER M.V. FITCH, P.E.  
PROJECT NAME : ROCHESTER  
PROJECT NUMBER : BRF 0162 (17)  
SHEET 121 OF 238 SHEETS



**GUARDRAIL APPROACH SECTION,  
GALVANIZED 2 RAIL BOX BEAM**  
STA. 333+37 - 333+66 LT  
STA. 333+70 - 333+80 RT  
STA. 334+28 - 334+52 LT  
STA. 334+42 - 334+71 RT

**BRIDGE RAILING, GALVANIZED  
2 RAIL BOX BEAM**  
STA. 333+66 - 334+28 LT  
STA. 333+80 - 334+42 RT

**MANUFACTURED TERMINAL SECTION,  
TANGENT**  
STA. 332+30 - 332+81 LT

**CONSTRUCT 8.0' PAVED APRON**  
STA. 334+72, LT - 55.0' WIDE

**CONSTRUCT 5.0' PAVED APRON**  
STA. 333+64, RT - 28.0' WIDE  
STA. 335+06, RT - 16.5' WIDE

**CONSTRUCT 10.0' GRAVEL DRIVE**  
STA. 334+66, LT - 10.0' WIDE

**CONSTRUCT 13.0' GRAVEL DRIVE**  
STA. 333+64, RT - 13.0' WIDE

**CONSTRUCT 16.5' GRAVEL DRIVE**  
STA. 335+06, RT - 16.5' WIDE

**CAST-IN-PLACE  
CONCRETE CURB, TYPE B**  
STA. 333+34 - 333+67 LT  
STA. 333+69 - 333+80 RT  
STA. 334+28 - 334+50 LT  
STA. 334+41 - 334+82 RT

**STEEL BEAM GUARDRAIL,  
GALVANIZED W/ 8 FEET POSTS**  
STA. 332+81 - 333+37 LT  
STA. 334+71 - 334+95, 21.2 RT

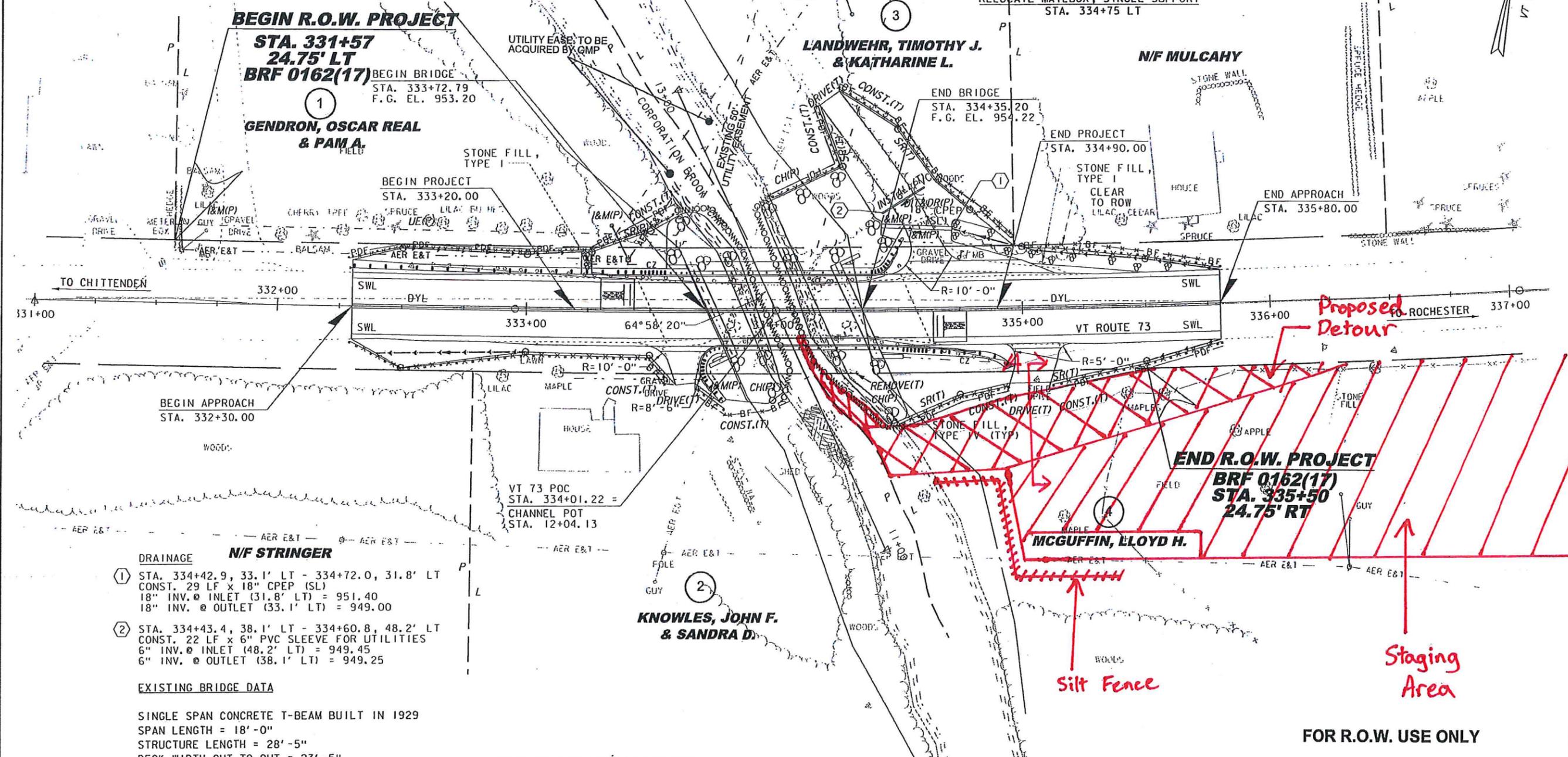
**REMOVAL AND DISPOSAL OF GUARDRAIL**  
STA. 332+61 - 333+88 LT  
STA. 333+84 - 333+94 RT  
STA. 334+15 - 334+52 RT  
STA. 334+21 - 334+94 LT

**LIMITS OF COLD PLANING**  
STA. 332+30 - 332+80 LT & RT  
STA. 335+30 - 335+80 LT & RT

**RELOCATE MAILBOX, SINGLE SUPPORT**  
STA. 334+75 LT

**EDGE OF PAVEMENT ROADWAY WIDTH TRANSITION**  
STA. 332+80 = 13.32 LT & 13.07 RT  
STA. 332+97 = 14.00 LT  
STA. 333+04 = 14.00 RT  
STA. 334+99 = 14.00 LT  
STA. 335+13 = 14.00 RT  
STA. 335+30 = 12.76 LT & 14.68 RT

**STONE FILL, TYPE I**  
STA. 332+24 - 332+60 LT  
STA. 334+72, 31.8 LT - 335+80, 13.2 LT



**BEGIN R.O.W. PROJECT**  
**STA. 331+57**  
**24.75' LT**  
**BRF 0162(17)**  
**GENDRON, OSCAR REAL & PAM A.**

**LANDWEHR, TIMOTHY J. & KATHARINE L.**

**N/F MULCAHY**

**END R.O.W. PROJECT**  
**BRF 0162(17)**  
**STA. 335+50**  
**24.75' RT**  
**MCGUFFIN, LLOYD H.**

**KNOWLES, JOHN F. & SANDRA D.**

**DRAINAGE N/F STRINGER**

① STA. 334+42.9, 33.1' LT - 334+72.0, 31.8' LT  
CONST. 29 LF x 18" CPEP (SL)  
18" INV. @ INLET (31.8' LT) = 951.40  
18" INV. @ OUTLET (33.1' LT) = 949.00

② STA. 334+43.4, 38.1' LT - 334+60.8, 48.2' LT  
CONST. 22 LF x 6" PVC SLEEVE FOR UTILITIES  
6" INV. @ INLET (48.2' LT) = 949.45  
6" INV. @ OUTLET (38.1' LT) = 949.25

**EXISTING BRIDGE DATA**

SINGLE SPAN CONCRETE T-BEAM BUILT IN 1929  
SPAN LENGTH = 18'-0"  
STRUCTURE LENGTH = 28'-5"  
DECK WIDTH OUT TO OUT = 23'-5"  
BRIDGE WIDTH CURB TO CURB = 20'-3"

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.



**FOR R.O.W. USE ONLY**

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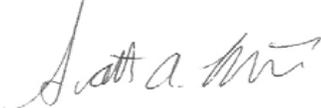
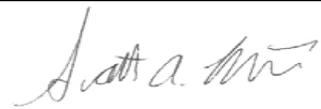
PROJECT NAME: ROCHESTER	PLOT DATE: 25-MAR-2013
PROJECT NUMBER: BRF 0162(17)	DRAWN BY: J. BLANCHARD
FILE NAME: r85e035.layout.dgn	CHECKED BY: H. PETROVS
PROJECT LEADER: J. FITCH	SHEET 173 OF 238
DESIGNED BY: C.L. CILLEY	
ROW LAYOUT SHEET 1 OF 1	

**APPENDIX E**  
**EPSC PLAN REVISION DOCUMENTATION FORM**

### EPSC Plan Revision Documentation Form

This Erosion Prevention and Sediment Control Plan (EPSC Plan) should be revised and updated to address changes in site conditions, new or revised government regulations, and additional on-site stormwater and erosion controls.

All revisions to the EPSC Plan must be documented on the EPSC Plan Revision Documentation Form, which should include the information shown below. The authorized facility representative who approves the EPSC Plan should be an individual at or near the top of the facility's management organization, such as the president, vice president, construction manager or supervisor, on-site coordinator, or environmental manager. The signature of this representative attests that the EPSC Plan revision information is true and accurate. Previous authors and facility representatives are not responsible for the revisions.

Revision Number	Description of the Revision	Date	Revision Preparer	Company Representative Signature
Originally Issued	Draft	June 4, 2014	Pathways Consulting, LLC	 Scott A. Williams, P.E.
1	Final Revisions per VTrans		Pathways Consulting, LLC	 Scott A. Williams, P.E.
2			Pathways Consulting, LLC	 Scott A. Williams, P.E.
3				
4				
5				

ON-SITE CONSTRUCTION STAGING AREA. STAGING FOR REMOVAL OF BRIDGE WINGWALLS AND GUARDRAIL ANTICIPATED WITHIN EXISTING ROADWAY AND SHOULDER AREAS. WITH THE EXCEPTION OF APPROVED OFF-SITE AREAS, AREA SHALL HAVE PERIMETER EROSION CONTROLS (SILT FENCE AND/OR TURBIDITY BARRIERS), CRUSHED STONE ON SURFACE WHERE PAVEMENT IS REMOVED (AS NEEDED), AND SEPARATE PERIMETER EROSION CONTROLS FOR ANY EARTHEN MATERIAL STORAGE/STOCKPILING THAT WILL OCCUR WITHIN THIS AREA.

TRAFFIC CONTROLS FOR TEMPORARY LANE CLOSURE DURING BRIDGE WINGWALL REMOVAL PER APPROVED TRAFFIC CONTROL PLAN (TTP.)

INSTALL SILT FENCE ALONG TOE OF TEMPORARY ROADWAY EMBANKMENT (TYP.)

PREVIOUSLY APPROVED IMPACT = 7,846 SF

INSTALL PROJECT DEMARCATION FENCE ALONG LIMITS OF PROJECT (TYP.)

INSTALL STONE CHECK DAMS TO CONTROL FLOW AND SEDIMENT IN DITCHES (TYP.)

INSTALL TEMPORARY STABILIZATION ON ALL AREAS DISTURBED DURING CONSTRUCTION INCLUDING SEED, MULCH AND/OR MULCH NETTING (TYP.)

APPROVED OFF-SITE TEMPORARY STAGING AREA TO BE USED DURING ALL PHASES OF CONSTRUCTION. AT A MINIMUM, PERIMETER CONSTRUCTION FENCE AND EROSION CONTROLS SHALL BE INSTALLED AROUND THIS AREA. INSTALL ADDITIONAL STORMWATER AND SEDIMENT CONTROLS AND CRUSHED STONE SURFACE STABILIZATION, AS NEEDED.

INSTALL STONE CHECK DAMS TO CONTROL CONCENTRATED FLOW ALONG TOP OF BANK (TYP.)

TRAFFIC CONTROLS FOR TEMPORARY LANE CLOSURE DURING BRIDGE WINGWALL REMOVAL PER APPROVED TRAFFIC CONTROL PLAN (TTP.)

PREVIOUSLY APPROVED IMPACT = 11,507 SF

INSTALL STABILIZED CONSTRUCTION ENTRANCE TO CONTAIN SEDIMENT TRACKING DURING CONSTRUCTION.

APPROVED OFF-SITE TEMPORARY STAGING AREA TO BE USED DURING ALL PHASES OF CONSTRUCTION. AT A MINIMUM, PERIMETER CONSTRUCTION FENCE AND EROSION CONTROLS SHALL BE INSTALLED AROUND THIS AREA. INSTALL ADDITIONAL STORMWATER AND SEDIMENT CONTROLS AND CRUSHED STONE SURFACE STABILIZATION, AS NEEDED.

INSTALL TURBIDITY BARRIER AROUND WORK AREA PRIOR TO CONSTRUCTION (TYP.)

PROPOSED TEMPORARY IMPACT (FOR STAGING AND ACCESS) = 19,694 SF

PROPOSED TEMPORARY IMPACT (FOR STAGING AND ACCESS) = 749 SF

KEY TO EROSION CONTROL SYMBOLS:

- SF — SILT FENCE
- COFFERDAM
- ▲ STONE CHECK DAM
- ⇐ DIRECTION OF FLOW ARROW
- TURBIDITY BARRIER
- POF — PROJECT DEMARCATION FENCE
- TEMPORARY STAGING AREAS
- MULCH OR MULCH NETTING
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY/PERMANENT STONE FILL
- ADDITIONAL IMPACT AREAS
- PREVIOUSLY PERMITTED IMPACT LIMITS

GENERAL NOTES:

1. REFERENCE MADE TO PLANS PREPARED FOR THE STATE OF VERMONT AGENCY OF TRANSPORTATION BY VANASSE HANGEN BRUSTLIN, INC., "ROCHESTER, PROJECT NUMBER BRP 0162(17), 9/13/13," SHEET 167 OF 238.
2. IN THE EVENT OF CONFLICT BETWEEN DETAILS, EROSION CONTROLS AND/OR RELATED NOTES SHOWN ON PATHWAYS EPSC PLANS AND VTRANS CONTRACT DOCUMENTS, CONTRACT DOCUMENTS SHALL GOVERN EXCEPT WHERE MORE STRINGENT REGULATORY REQUIREMENTS APPLY.

PHASE 1: SITE PREPARATION AND EXISTING BRIDGE WINGWALL REMOVAL



REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY

BRIDGE NO. 16 - PHASE 1 EROSION PREVENTION AND SEDIMENT CONTROL PLAN FOR W.M. SCHULTZ CONSTRUCTION, INC FOR VERMONT AGENCY OF TRANSPORTATION - ROCHESTER BRP 0162 (17)  
VERMONT ROUTE 73, ROCHESTER, VERMONT

PATHWAYS CONSULTING, LLC  
240 MECHANIC STREET, SUITE 100  
LEBANON, NEW HAMPSHIRE 03786  
(603) 448-2200

SCALE: 1" = 40'  
DESIGNED BY: SAW  
DRAWN BY: SAW  
CHECKED BY: SAW  
DATE: 06/04/14  
PROJ. NO. 12455

